

INTERNATIONAL SEARCH REPORT

Application No

PCT/FR 03/01825

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L41/04

Rec'd PCT/FR 20 DEC 2004

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L F02D B06B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FABIJANSKI P: "Series resonant converter with sandwich-type piezoelectric ceramic transducers" 6TH EUROPEAN CONFERENCE ON POWER ELECTRONICS AND APPLICATIONS (EPE '95), SEVILLE, SPAIN, 19 - 21 September 1995, pages 591-594, vol.2, XP000537795 the whole document --- -/--	1-6



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

30 March 2004

Date of mailing of the international search report

07/04/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>FABIJANSKI P ET AL: "Series resonant converter with sandwich-type piezoelectric ceramic transducers" PROCEEDINGS OF THE IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL TECHNOLOGY (ICIT'96), SHANGHAI, CHINA, 2 - 6 December 1996, pages 252-256, XP010232625 ISBN: 0-7803-3104-4 the whole document</p>	1-6
A	<p>TATSUTA M ET AL: "1 MHz, 1 kW series resonant converter for ultrasonic transducer using the high frequency power SITs" 19TH ANNUAL IEEE POWER ELECTRONICS SPECIALISTS CONFERENCE (PESC '88), KYOTO, JAPAN, 11 - 14 April 1988, pages 1236-1243, vol. 2, XP000042067 ISSN: 0275-9306 page 1239, right-hand column -page 1243, left-hand column</p>	1-3
A	<p>FR 2 652 960 A (EMERSON ELECTRIC CO) 12 April 1991 (1991-04-12) page 8, line 6 -page 9, line 12 page 13, line 23 -page 16, line 15 figures 1-3</p>	1-6
A	<p>FR 2 421 513 A (GABORIAUD PAUL) 26 October 1979 (1979-10-26) page 1, line 25 -page 3, line 5; claim 1</p>	1
A	<p>US 4 749 897 A (NATSUME YOSHIMI ET AL) 7 June 1988 (1988-06-07) column 4, line 65 -column 7, line 65; figures 8-12</p>	

INTERNATIONAL SEARCH REPORT

li on on patent family members

Application No

PCT/FR 03/01825

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2652960	A	12-04-1991	US 4973876 A	27-11-1990
			CA 2014376 A1	20-03-1991
			DE 4025637 A1	28-03-1991
			FR 2652960 A1	12-04-1991
			GB 2236222 A ,B	27-03-1991
			JP 2936232 B2	23-08-1999
			JP 3118880 A	21-05-1991
FR 2421513	A	26-10-1979	FR 2421513 A1	26-10-1979
			BE 875254 A1	02-10-1979
			CH 632360 A5	30-09-1982
			DE 2912620 A1	04-10-1979
			GB 2021345 A ,B	28-11-1979
			US 4264837 A	28-04-1981
US 4749897	A	07-06-1988	JP 2546231 B2	23-10-1996
			JP 62210241 A	16-09-1987
			JP 2508027 B2	19-06-1996
			JP 63107077 A	12-05-1988